

# Liliane F Lona

## List of Publications by Year in descending order

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100  
papers

2,443  
citations

257357

24  
h-index

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102  
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102  
docs citations

102  
times ranked

2367  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | An overview on properties and applications of poly(butylene adipate-terephthalate) "PBAT based composites. <i>Polymer Engineering and Science</i> , 2019, 59, E7.  | 1.5 | 257       |
| 2  | Mechanical, rheological and degradation properties of PBAT nanocomposites reinforced by functionalized cellulose nanocrystals. <i>European Polymer Journal</i> , 2017, 97, 356-365.  | 2.6 | 170       |
| 3  | How do cellulose nanocrystals affect the overall properties of biodegradable polymer nanocomposites: A comprehensive review. <i>European Polymer Journal</i> , 2018, 108, 274-285.   | 2.6 | 150       |
| 4  | Porous nanocellulose gels and foams: Breakthrough status in the development of scaffolds for tissue engineering. <i>Materials Today</i> , 2020, 37, 126-141.   | 8.3 | 134       |
| 5  | Isolation and surface modification of cellulose nanocrystals from sugarcane bagasse waste: From a micro- to a nano-scale view. <i>Applied Surface Science</i> , 2018, 436, 1113-1122.                                      | 3.1 | 129       |
| 6  | Polymer Composites Reinforced with Natural Fibers and Nanocellulose in the Automotive Industry: A Short Review. <i>Journal of Composites Science</i> , 2019, 3, 51.  | 1.4 | 124       |
| 7  | Nanocellulose/bioactive glass cryogels as scaffolds for bone regeneration. <i>Nanoscale</i> , 2019, 11, 19842-19849.   | 2.8 | 93        |
| 8  | Functionalized cellulose nanocrystals as reinforcement in biodegradable polymer nanocomposites. <i>Polymer Composites</i> , 2018, 39, E9.  | 2.3 | 88        |
| 9  | Neural network applications in polymerization processes. <i>Brazilian Journal of Chemical Engineering</i> , 2005, 22, 401-418.   | 0.7 | 68        |
| 10 | Environmentally friendly polymer composites based on PBAT reinforced with natural fibers from the amazon forest. <i>Polymer Composites</i> , 2019, 40, 3351-3360.  | 2.3 | 45        |
| 11 | Heterogeneous modeling for fluidized-bed polymerization reactor. <i>Chemical Engineering Science</i> , 2001, 56, 963-969.  | 1.9 | 44        |
| 12 | Modeling of the Nitroxide-Mediated Radical Copolymerization of Styrene and Divinylbenzene. <i>Macromolecular Reaction Engineering</i> , 2009, 3, 288-311.  | 0.9 | 44        |
| 13 | Study of thermal and mechanical properties of PMMA/LDHs nanocomposites obtained by in situ bulk polymerization. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1025-1030.                         | 3.8 | 44        |
| 14 | Simulation of Styrene Polymerization by Monomolecular and Bimolecular Nitroxide-Mediated Radical Processes over a Range of Reaction Conditions. <i>Macromolecular Theory and Simulations</i> , 2007, 16, 194-208.          | 0.6 | 41        |
| 15 | Silver nanoparticles coated with dodecanethiol used as fillers in non-cytotoxic and antifungal PBAT surface based on nanocomposites. <i>Materials Science and Engineering C</i> , 2019, 98, 800-807.                       | 3.8 | 37        |
| 16 | A Comparison of Reaction Mechanisms for Reversible Addition-Fragmentation Chain Transfer Polymerization Using Modeling Tools. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2006, 43, 1293-1322. | 1.2 | 36        |
| 17 | Effect of phosphate concentration on the production of dextranucrase by <i>Leuconostoc mesenteroides</i> NRRL $\bar{\iota}$ 2B512F. <i>Bioprocess and Biosystems Engineering</i> , 2003, 26, 57-62.                        | 1.7 | 35        |
| 18 | Cellulose nanocrystal-based poly(butylene adipate-terephthalate) nanocomposites covered with antimicrobial silver thin films. <i>Polymer Engineering and Science</i> , 2019, 59, E356.                                     | 1.5 | 31        |

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|----|--|-----|-----------|
| 19 | The effect of maltose on dextran yield and molecular weight distribution. <i>Bioprocess and Biosystems Engineering</i> , 2005, 28, 9-14.   | 1.7 | 30        |
| 20 | Multizone circulating reactor modeling for gas-phase polymerization. I. Reactor modeling. <i>Journal of Applied Polymer Science</i> , 2004, 93, 1042-1052.   | 1.3 | 28        |
| 21 | Ultrathin polymer fibers hybridized with bioactive ceramics: A review on fundamental pathways of electrospinning towards bone regeneration. <i>Materials Science and Engineering C</i> , 2021, 123, 111853.  | 3.8 | 28        |
| 22 | Controlled Free-Radical Copolymerization Kinetics of Styrene and Divinylbenzene by Bimolecular NMRP using TEMPO and Dibenzoyl Peroxide. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2006, 43, 995-1011.                                  | 1.2 | 27        |
| 23 | LDPE-based composites reinforced with surface modified cellulose fibres: 3D morphological and morphometrical analyses to understand the improved mechanical performance. <i>European Polymer Journal</i> , 2019, 117, 105-113.                                       | 2.6 | 26        |
| 24 | Assessing the Importance of Diffusion-Controlled Effects on Polymerization Rate and Molecular Weight Development in Nitroxide-Mediated Radical Polymerization of Styrene. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2007, 44, 193-203. | 1.2 | 25        |
| 25 | In situ synthesis, morphology, and thermal properties of polystyrene-MgAl layered double hydroxide nanocomposites. <i>Polymer Engineering and Science</i> , 2012, 52, 1754-1760.   | 1.5 | 25        |
| 26 | A Protocol for the Estimation of Parameters in Process Models: Case Studies with Polymerization Scenarios. <i>Macromolecular Theory and Simulations</i> , 2004, 13, 115-132.   | 0.6 | 24        |
| 27 | Effect of the addition of inert or TEMPO-capped prepolymer on polymerization rate and molecular weight development in the nitroxide-mediated radical polymerization of styrene. <i>Journal of Applied Polymer Science</i> , 2008, 109, 3665-3678.                    | 1.3 | 23        |
| 28 | Another Perspective on the Nitroxide Mediated Radical Polymerization (NMRP) of Styrene Using 2,2,6,6-tetramethyl-1-piperidinyloxy (TEMPO) and Dibenzoyl Peroxide (BPO). <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2007, 44, 337-349.   | 1.2 | 22        |
| 29 | Thermal polymerization of styrene in the presence of TEMPO. <i>Chemical Engineering Science</i> , 2009, 64, 304-312.   | 1.9 | 20        |
| 30 | A Combined Computational and Experimental Study on the Polymerization of $\epsilon$ -Caprolactone. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 13387-13395.   | 1.8 | 20        |
| 31 | Optimizing panose production by modeling and simulation using factorial design and surface response analysis. <i>Journal of Food Engineering</i> , 2006, 75, 433-440.  | 2.7 | 19        |
| 32 | A replicated investigation of nitroxide-mediated radical polymerization of styrene over a range of reaction conditions. <i>Canadian Journal of Chemical Engineering</i> , 2008, 86, 879-892.   | 0.9 | 19        |
| 33 | S ntese e caracteriza o de Nanocomp sitos Esfoliados de Poliestireno: Hidr xido Duplo Lamelar via polimeriza o in situ. <i>Polimeros</i> , 2011, 21, 34-38.  | 0.2 | 19        |
| 34 | Fluidized-bed reactor modeling for polyethylene production. <i>Journal of Applied Polymer Science</i> , 2001, 81, 321-332.   | 1.3 | 18        |
| 35 | Polystyrene/kaolinite nanocomposite synthesis and characterization via in situ emulsion polymerization. <i>Polymer Bulletin</i> , 2015, 72, 387-404.   | 1.7 | 18        |
| 36 | Multizone circulating reactor modeling for gas-phase polymerization. II. Reactor operating with gas barrier in the downer section. <i>Journal of Applied Polymer Science</i> , 2004, 93, 1053-1059.  | 1.3 | 17        |

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|----|--|-----|-----------|
| 37 | Effect of initiator type and concentration on polymerization rate and molecular weight in the bimolecular nitroxide-mediated radical polymerization of styrene. <i>Advances in Polymer Technology</i> , 2010, 29, 11-19. | 0.8 | 17        |
| 38 | Inverse modeling applications in emulsion polymerization of vinyl acetate. <i>Chemical Engineering Science</i> , 2004, 59, 3159-3167.  | 1.9 | 15        |
| 39 | Nitroxide-mediated radical copolymerization of styrene and divinylbenzene: increased polymerization rate by using TBEC as initiator. <i>Journal of Materials Science</i> , 2010, 45, 1878-1884.                          | 1.7 | 15        |
| 40 | Styrene ATRP using the new initiator 2,2,2-tribromoethanol: Experimental and simulation approach. <i>Polymer Engineering and Science</i> , 2015, 55, 2270-2276.  | 1.5 | 15        |
| 41 | Correlation between water absorption and mechanical properties of polyamide 6 filled with layered double hydroxides (LDH). <i>Materials Research Express</i> , 2018, 5, 065004.  | 0.8 | 15        |
| 42 | Tin(II) 2-ethylhexanoate and ascorbic acid as reducing agents in solution ARGET ATRP: A kinetic study approach by mathematical modeling and simulation. <i>Chemical Engineering Journal</i> , 2019, 364, 186-200.        | 6.6 | 15        |
| 43 | Synthesis and characterization of LDHs/PMMA nanocomposites: Effect of two different intercalated anions on the mechanical and thermal properties. <i>Journal of Applied Polymer Science</i> , 2012, 124, 1764-1770.      | 1.3 | 14        |
| 44 | Simulation of temperature effect on the structure control of polystyrene obtained by atom-transfer radical polymerization. <i>Polimeros</i> , 2016, 26, 313-319.   | 0.2 | 14        |
| 45 | Encapsulation of N,N-diethylmeta-toluamide (DEET) via miniemulsion polymerization for temperature controlled release. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47139.                                      | 1.3 | 14        |
| 46 | Silver nanoparticles incorporated into nanostructured biopolymer membranes produced by electrospinning: a study of antimicrobial activity. <i>Brazilian Journal of Pharmaceutical Sciences</i> , 2015, 51, 911-921.      | 1.2 | 13        |
| 47 | Numerical simulation and parametric study of solution ARGET ATRP of styrene. <i>Computational Materials Science</i> , 2016, 124, 211-219.  | 1.4 | 13        |
| 48 | Optimization of reaction conditions in functionalized polystyrene synthesis via ATRP by simulations and factorial design. <i>Polymer Bulletin</i> , 2016, 73, 1795-1810.   | 1.7 | 13        |
| 49 | Effect of Layered Double Hydroxides on the Mechanical, Thermal, and Fire Properties of Poly(methyl Methacrylate) Nanocomposites. <i>Journal of Applied Polymer Science</i> , 2017, 121, 10784-10794.                     | 0.8 | 12        |
| 50 | Kinetic modeling of atom-transfer radical polymerization: inclusion of break reactions in the mechanism. <i>Polymer Bulletin</i> , 2016, 73, 2105-2119.  | 1.7 | 12        |
| 51 | Artificial neural networks towards average properties targets in styrene ARGET-ATRP. <i>Chemical Engineering Journal</i> , 2021, 407, 126999.  | 6.6 | 12        |
| 52 | Fluidized-bed reactor and physical-chemical properties modeling for polyethylene production. <i>Computers and Chemical Engineering</i> , 1999, 23, S803-S806.  | 2.0 | 11        |
| 53 | Developing an educational software for heat exchangers and heat exchanger networks projects. <i>Computers and Chemical Engineering</i> , 2000, 24, 1247-1251.  | 2.0 | 11        |
| 54 | APPLICATION OF NEURAL NETWORKS FOR THE DEFINITION OF THE OPERATING CONDITIONS OF FLUIDIZED BED POLYMERIZATION REACTORS. <i>Polymer-Plastics Technology and Engineering</i> , 2002, 10, 181-192.                          | 0.7 | 11        |

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|----|---|-----|-----------|
| 55 | Continuous polymerization in tubular reactors with prepolymerization: Analysis using two-dimensional phenomenological model and hybrid model with neural networks. <i>Journal of Applied Polymer Science</i> , 2004, 91, 871-882.                   | 1.3 | 11        |
| 56 | Nitroxide-mediated radical polymerization of styrene using mono- and di-functional initiators. <i>Chemical Engineering Science</i> , 2007, 62, 5240-5244.   | 1.9 | 11        |
| 57 | Layered double hydroxides as fillers in poly(l-lactide) nanocomposites, obtained by in situ bulk polymerization. <i>Polimeros</i> , 2016, 26, 106-114.  | 0.2 | 10        |
| 58 | Modeling of Ring Opening Polymerization: A short review with insights on how to develop the method of moments. <i>Chemical Engineering Science</i> , 2021, 246, 116934.   | 1.9 | 10        |
| 59 | Synthesis and characterization of biodegradable poly(l-lactide)/layered double hydroxide nanocomposites. <i>Polymer Bulletin</i> , 2014, 71, 2235-2245.   | 1.7 | 9         |
| 60 | Comparison between cellulose nanocrystal and microfibrillated cellulose as reinforcement of poly(vinyl acetate) composites obtained by either in situ emulsion polymerization or a simple mixing technique. <i>Cellulose</i> , 2021, 28, 2273-2286. | 2.4 | 9         |
| 61 | Evaluation of the effect of dry-film biocides on paint film preservation using neural networks. <i>Brazilian Journal of Chemical Engineering</i> , 2010, 27, 643-651.   | 0.7 | 8         |
| 62 | Kinetics of Nitroxide Mediated Radical Polymerization of Styrene with Unimolecular Initiators. <i>Macromolecular Symposia</i> , 2010, 289, 95-107.  | 0.4 | 8         |
| 63 | Síntese e caracterização de nanocompósitos de poliestireno/hidroxissal lamelar. <i>Química Nova</i> , 2014, 37, 18-21.  | 0.3 | 8         |
| 64 | Heterogeneous modeling of fluidized bed polymerization reactors. Influence of mass diffusion into the polymer particle. <i>Computers and Chemical Engineering</i> , 2002, 26, 841-848.  | 2.0 | 7         |
| 65 | Modeling Insights on the TEMPO Mediated Radical Polymerization of Styrene. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2011, 48, 681-687.   | 1.2 | 7         |
| 66 | In situ synthesis of polystyrene nanocomposites with layered double hydroxide with an unusual anion arrangement: Morphology and thermal and mechanical properties. <i>Journal of Applied Polymer Science</i> , 2016, 133, .                         | 1.3 | 7         |
| 67 | The economics of the detailed design of heat exchanger networks using the Bell Delaware method. <i>Computers and Chemical Engineering</i> , 2000, 24, 1349-1353.  | 2.0 | 6         |
| 68 | COMPARATIVE TRENDS OF COPOLYMERIZATIONS INVOLVING ALPHA METHYL STYRENE AT ELEVATED TEMPERATURES 1*. <i>Polymer-Plastics Technology and Engineering</i> , 2002, 10, 285-309.   | 0.7 | 6         |
| 69 | Artificial Neural Networks Associated to Calorimetric Measurements Used as a Method to Predict Polymer Composition of High Solid Content Emulsion Copolymerizations. <i>Macromolecular Materials and Engineering</i> , 2005, 290, 485-494.          | 1.7 | 6         |
| 70 | Emulsion Polymerization of Styrene Mediated by TEMPO at Low Temperature. <i>Macromolecular Reaction Engineering</i> , 2012, 6, 516-522.   | 0.9 | 6         |
| 71 | Preparação e avaliação de nanocompósitos de poliestireno - hidróxido duplo lamelar HDL de ZnAl "organofuncionalizado com laurato/palmitato. <i>Polimeros</i> , 2015, 25, 117-124.   | 0.2 | 6         |
| 72 | Vegetable Oils Acting as Encapsulated Bioactives and Costabilizers in Miniemulsion Polymerization Reactions. <i>European Journal of Lipid Science and Technology</i> , 2018, 120, 1700130.  | 1.0 | 6         |

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|----|--|-----|-----------|
| 73 | Effect of layered hydroxide salts, produced by two different methods, on the mechanical and thermal properties of poly(methyl methacrylate). <i>Polymer Engineering and Science</i> , 2019, 59, 1065-1074.                             | 1.5 | 6         |
| 74 | Synthesis and analysis of phase segregation of polystyrene- <i>block</i> -poly(methyl methacrylate) and polystyrene and poly(methyl methacrylate). <i>Journal of Applied Polymer Science</i> , 2020, 137, 49416.                       | 1.3 | 6         |
| 75 | Fluidized bed reactor for polyethylene production. The influence of polyethylene prepolymerization. <i>Brazilian Journal of Chemical Engineering</i> , 2000, 17, 163-170.  | 0.7 | 6         |
| 76 | Electromagnetic evaluation of radar absorbing materials based on conducting polypyrrole and organic-inorganic nanocomposite of polypyrrole/kaolinite. <i>Journal of Applied Polymer Science</i> , 2022, 139, 52023.                    | 1.3 | 6         |
| 77 | New emulsion polymerization tubular reactor with internal angular baffles: Reaction temperature effect. <i>Journal of Applied Polymer Science</i> , 2006, 100, 2572-2581.  | 1.3 | 5         |
| 78 | Bifunctional initiators on the polymerization of vinyl acetate. <i>Journal of Applied Polymer Science</i> , 2013, 127, 1711-1716.  | 1.3 | 5         |
| 79 | Simulation of the Equilibrium Constant Effect on the Kinetics and Average Properties of Polystyrene Obtained by ATRP. <i>Journal of the Brazilian Chemical Society</i> , 2013, , .   | 0.6 | 5         |
| 80 | Effect of Lignin without Surface Treatment in <i>In Situ</i> Methyl Methacrylate Miniemulsion Polymerization. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3219-3226.  | 3.2 | 5         |
| 81 | Development of Polymer Resins using Neural Networks. <i>Polimeros</i> , 2002, 12, 164-170.   | 0.2 | 4         |
| 82 | Evaluation of Organically Modified Layered Double Hydroxides as Fillers for the Preparation of Polymer Nanocomposites in Miniemulsion Polymerization. <i>Macromolecular Reaction Engineering</i> , 2020, 14, 1900049.                  | 0.9 | 4         |
| 83 | Modeling and simulation of high-pressure industrial autoclave polyethylene reactor. <i>EXPRESS Polymer Letters</i> , 2008, 2, 57-64.   | 1.1 | 4         |
| 84 | Cellulose nanocrystals as initiator of ring-opening polymerization of $\epsilon$ -caprolactone: Mathematical modeling and experimental verification. <i>European Polymer Journal</i> , 2022, 170, 111171.                              | 2.6 | 4         |
| 85 | Predição do comportamento térmico de tubos compostos através de redes neurais. <i>Polimeros</i> , 2004, 14, 295-300.   | 0.2 | 3         |
| 86 | Development of a software to simulate free radical polymerization of linear and branched polymer using mono- and Bi-functional initiators. <i>Computer Aided Chemical Engineering</i> , 2005, , 445-450.                               | 0.3 | 3         |
| 87 | Analyzing the real advantages of bifunctional initiator over monofunctional initiator in free radical polymerization. <i>Journal of Applied Polymer Science</i> , 2010, 117, n/a-n/a.  | 1.3 | 2         |
| 88 | Living free radical polymerization using cyclic trifunctional initiator. <i>Journal of Applied Polymer Science</i> , 2012, 124, 3900-3904.   | 1.3 | 2         |
| 89 | Synthesis of heat exchanger networks considering stream splitting and the rigorous calculation of the heat transfer coefficient according to the bell delaware method. <i>Computer Aided Chemical Engineering</i> , 2000, , 1027-1032. | 0.3 | 1         |
| 90 | A Practical Approach To Simulate Polymerizations with Minimal Information. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 2634-2648.   | 1.8 | 1         |

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|-----|--|-----|-----------|
| 91  | Finite volume method as the numerical method for new emulsion polymerization tubular reactor with internal angle baffles. Journal of Applied Polymer Science, 2006, 102, 6037-6048.    | 1.3 | 1         |
| 92  | Modelling and simulation of high pressure industrial autoclave polyethylene reactor. Computer Aided Chemical Engineering, 2006, 21, 639-644.   | 0.3 | 1         |
| 93  | Enhancement of Mechanical and Thermal Properties of Poly(L-lactide) Nanocomposites Filled with Synthetic Layered Compounds. International Journal of Polymer Science, 2017, 2017, 1-8. | 1.2 | 1         |
| 94  | AN ALTERNATIVE ROUTE TO PRODUCE STANDARDS FOR GEL PERMEATION CHROMATOGRAPHY USING NITROXIDE MEDIATED POLYMERIZATION. Brazilian Journal of Chemical Engineering, 2017, 34, 283-293.     | 0.7 | 1         |
| 95  | The fluidized bed reactor with a prepolymerization system and its influence on polymer physicochemical characteristics. Brazilian Journal of Chemical Engineering, 2003, 20, 171-179.  | 0.7 | 1         |
| 96  | Artificial neural networks associated to calorimetry to preview polymer composition of high solid content emulsion copolymerizations. , 0, , .   |     | 0         |
| 97  | SimulaÃ§Ã£o numÃ©rica aplicada para avaliar o efeito da prÃ©-polimerizaÃ§Ã£o no comportamento de reatores tubulares. Polimeros, 2007, 17, 250-257.                                     | 0.2 | 0         |
| 98  | Polystyrene Produced by a Multifunctional Initiator. Computer Aided Chemical Engineering, 2009, , 1077-1081.   | 0.3 | 0         |
| 99  | Characterization by TEM of kaolinite to production of polymer nanocomposites. , 2012, , .  |     | 0         |
| 100 | EncapsulaÃ§Ã£o do Ã³leo de neem pela tÃ©cnica de miniemulsificaÃ§Ã£o/evaporaÃ§Ã£o do solvente. , 0, , .  |     | 0         |